

Welcome



Complete Streets Bike Innovations Open House

Thursday, May 9
5 to 6:30 p.m.
Alfalfa's Community Room
1651 Broadway

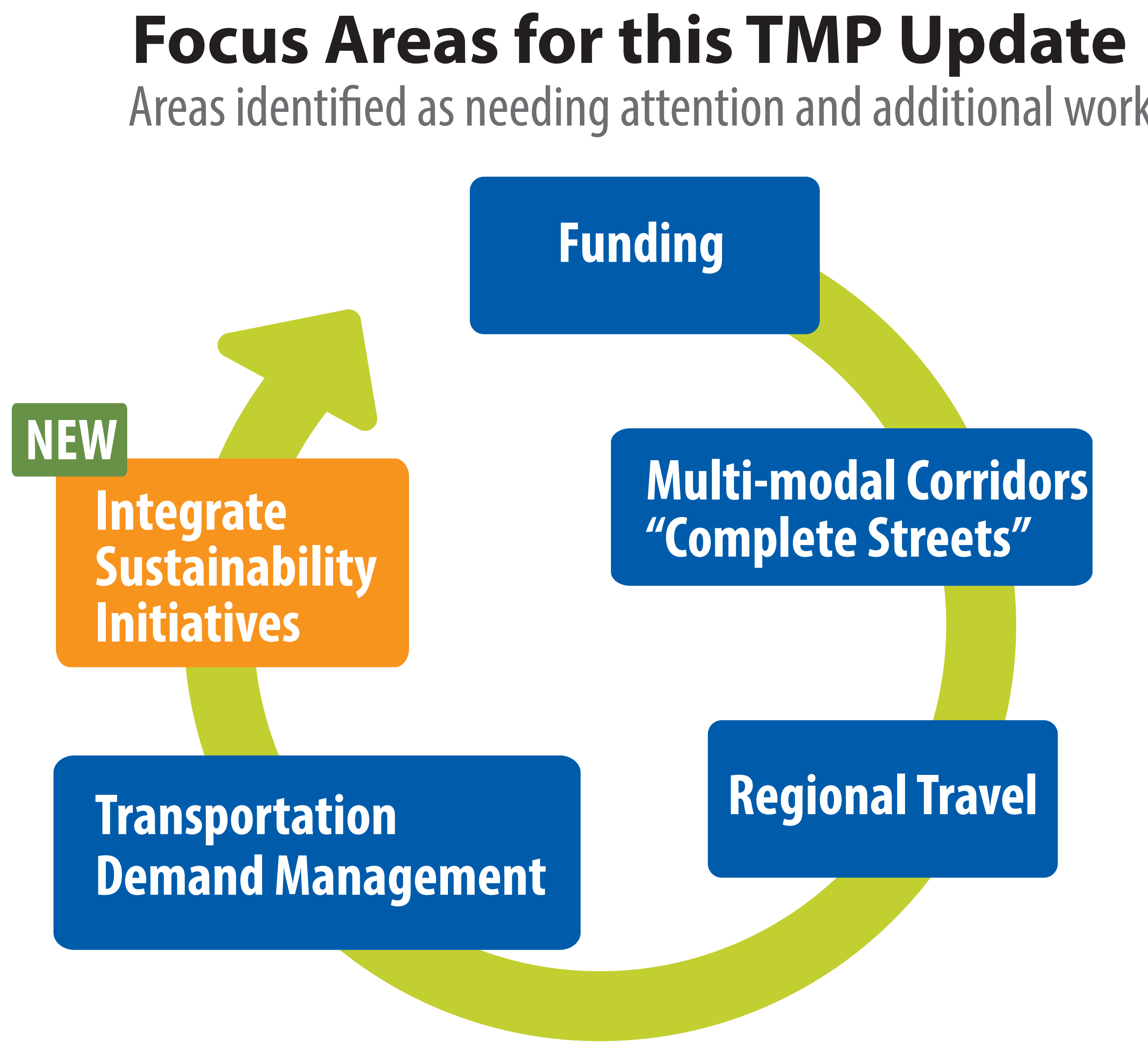
A big focus for the 2013 TMP Update is "Complete Streets." Complete streets are roadways that accommodate all modes of transportation.

"Complete streets play a big role in reducing greenhouse gases related to transportation. If roadway users see that they can just as easily get from point A to point B by taking the bus or riding their bike, they are more likely to get out of their cars. It's all about providing easy options to spark new choices." - Tracy Winfree, City of Boulder Transportation Director

2013 City of Boulder Transportation Master Plan Update

What is the Transportation Master Plan?

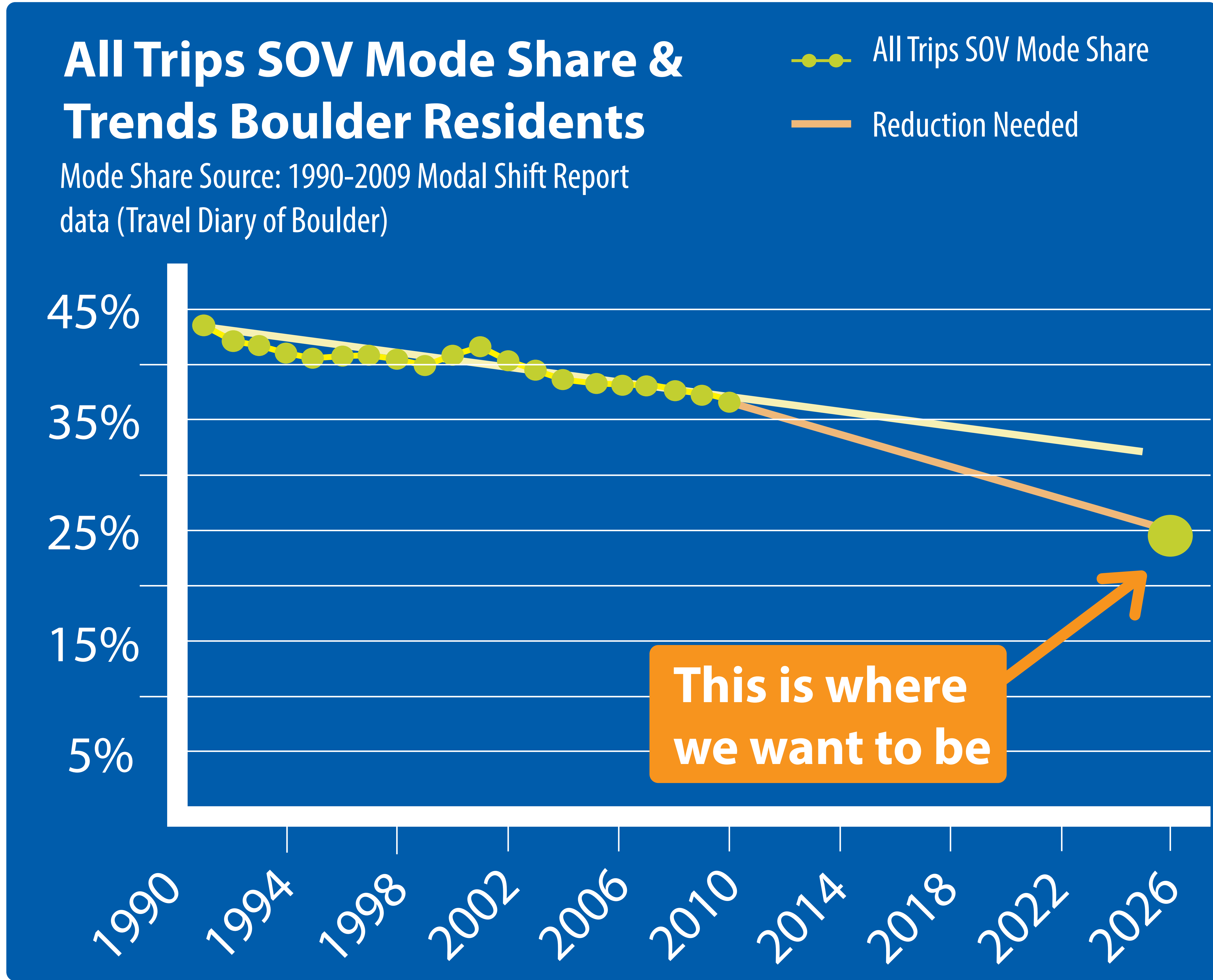
City master plans implement overall community goals from the Boulder Valley Comprehensive Plan. Boulder is a “mature” community with limited ability to expand its roadways and a strong commitment to environmental and community quality. The community has recognized since the first TMP was adopted in 1989 that continued growth in vehicle traffic threatened those values, thus the TMP has had consistent policy direction to limit the growth of vehicle traffic and accommodate travel in the other modes.



Why a Transportation Master Plan Update?

Boulder travels differently, but we are not on course to meet TMP Objectives including a target to reduce Single Occupant Vehicle (SOV) travel to 25% of all trips.

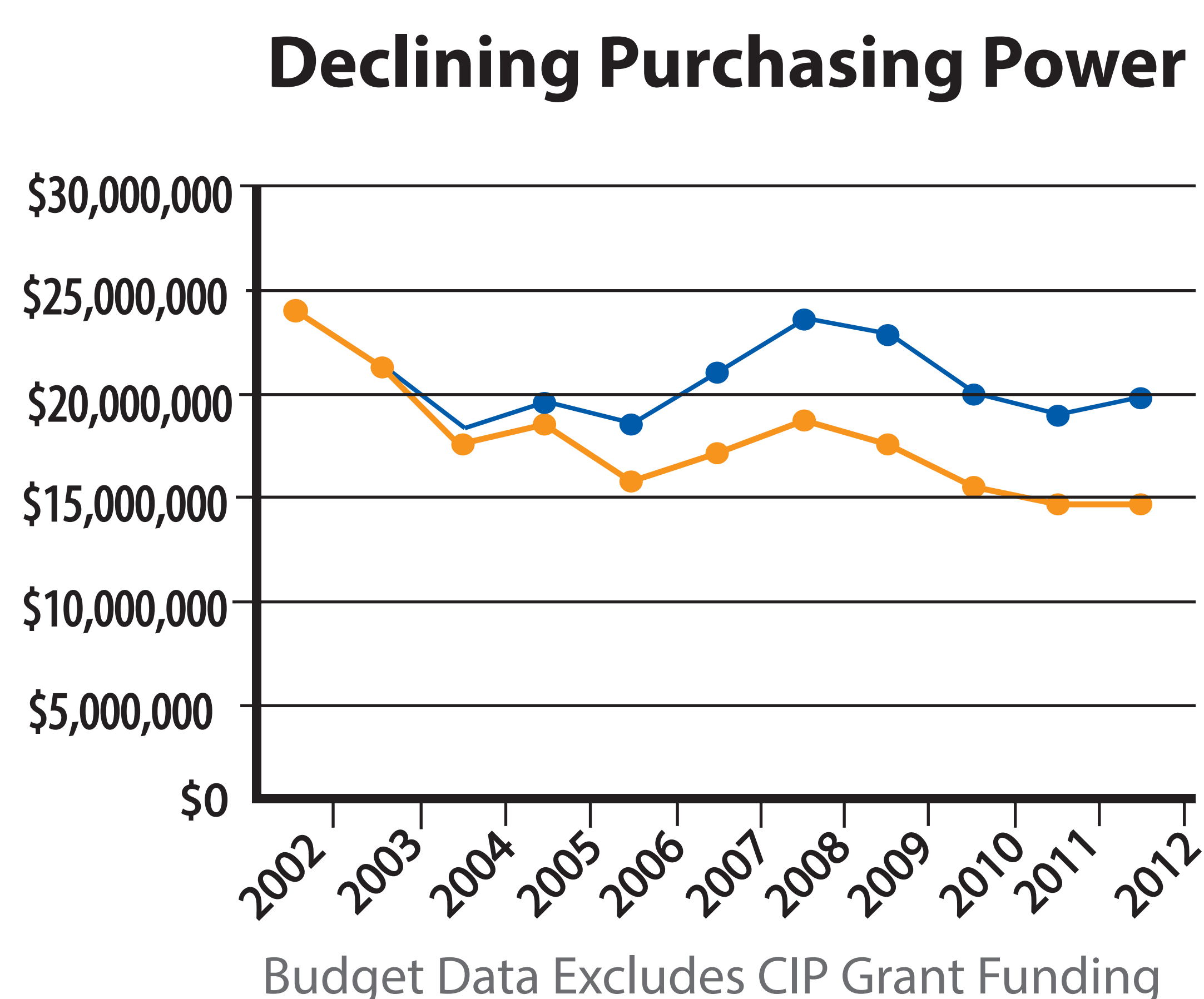
- The City is focused on long term sustainability and climate commitment goals, which will require additional efforts in transportation.
- Funding is being reduced at state and federal levels. Our community needs to identify local funding to achieve its transportation vision.
- An accessible and connected community, neighborhoods, and employment centers are fundamental.



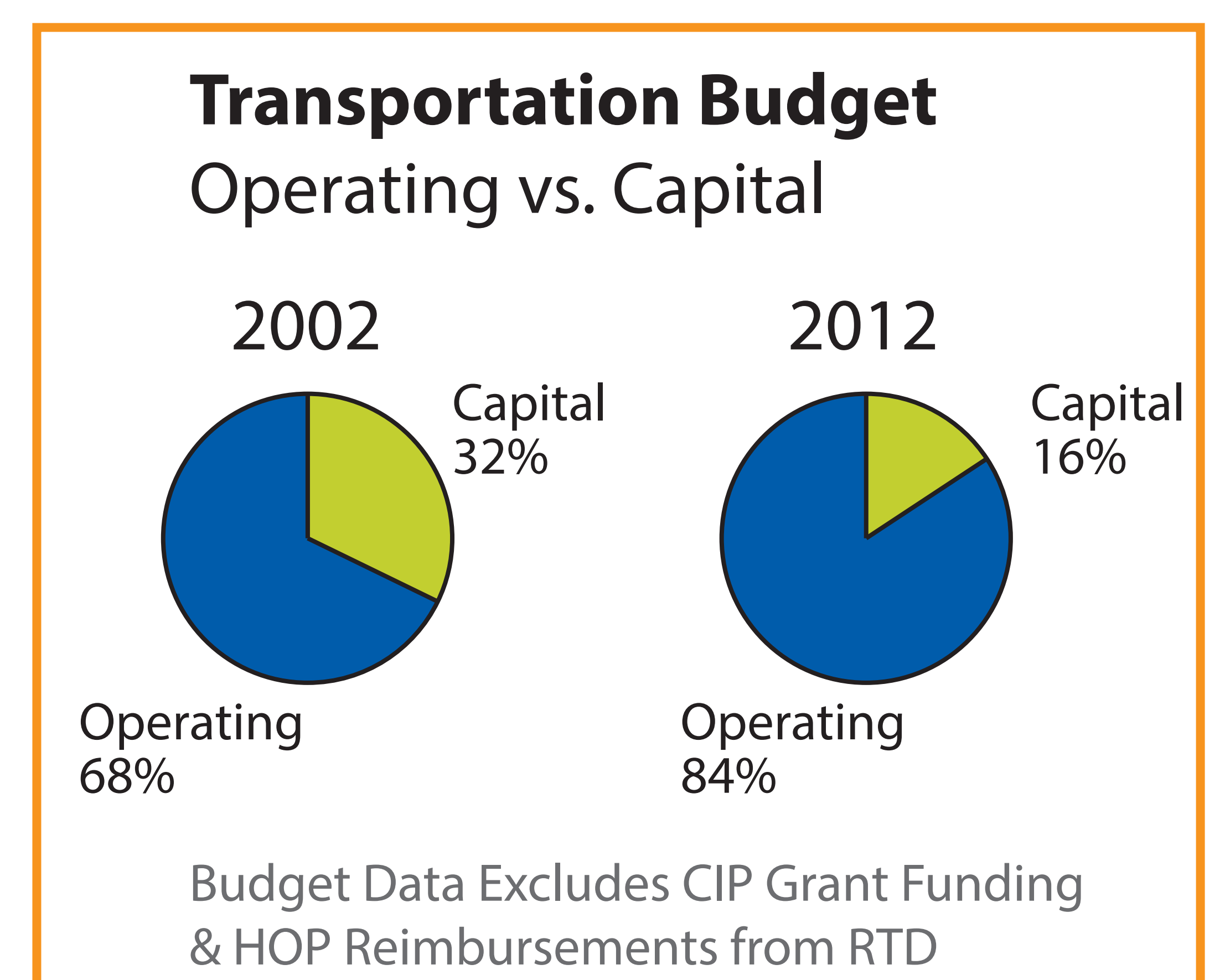
Transportation Funding Challenge

Boulder is facing stagnant revenue and increasing costs. Between 2002 and 2012 purchasing power declined by 39 %.

- Annual unfunded maintenance has grown to \$3.2m per year and will continue to grow if we do not address these shortfalls.
- If we do not solve this financial problem, the City will not be able to complete the core elements of our multi-modal infrastructure, and meet quality of life and Climate Commitment goals.



Today 84% of the transportation budget goes to maintenance and there is less funding available for enhancements.



Why this is important?

It is important to remember that the funding of transportation Operations and Maintenance (O&M) is just one piece of a larger puzzle. As O&M costs have steadily increased, the City has had decreased funding available to finish the Complete Streets Investment Plan and achieve the broader community goals from the TMP.

The TMP update will continue to fine tune transportation funding needs, update plans to build out the multi-modal transportation system, and identify new measurable objectives related to achieving the city's overall Sustainability Framework and Climate Commitment goals.

Complete Streets Focus Area Bike and Pedestrian

Where are we Today?

- 159 Centerline miles of bike facilities in comparison to 305 miles of road
- 95% of Boulder's arterial streets accommodate bicycles
- Platinum designated Bicycle friendly Community by League of American Bicyclists




Where do we want to be?

- More than 15% bike mode share
- A Diamond designated Bicycle Friendly Community
- Recognized as a Walk Friendly Community



Improving Boulder’s Bike System; Making it more safe and complete

As part of the Complete Streets focus area of the TMP update, we’ll launch an interactive living laboratory to:

-  Engage neighborhoods, conduct walk audits and learn what makes a good pedestrian environment.
-  Demonstrate new bike facilities and programs to see if they are right for boulder – potential innovations include cycle tracks, advisory bike lanes, trike bikes and skills workshops.
-  Develop a Bike & Walk Action Plan and prioritize policies, projects and programs to implement over the next three to five years.

Attracting the “Interested but Concerned” cyclist



“Interested but Concerned” cyclists are residents that like riding a bike, but are afraid to ride on the roadway with automobile traffic.

If we want to get to more than 15% bike mode share we need to get the “Interested but Concerned” cyclist out there riding for utilitarian purposes, like going to the grocery store, work, school, and daily errands.

Complete Streets Demonstration Bike Innovations

The "Living Laboratory" will install innovative bike-way treatments, creating an interactive environment for cyclists to experience and provide feedback on how these treatments address their need for improved mobility, comfort and safety. Proposed demonstration projects include:

Cycle Track / Protected Bike Lane

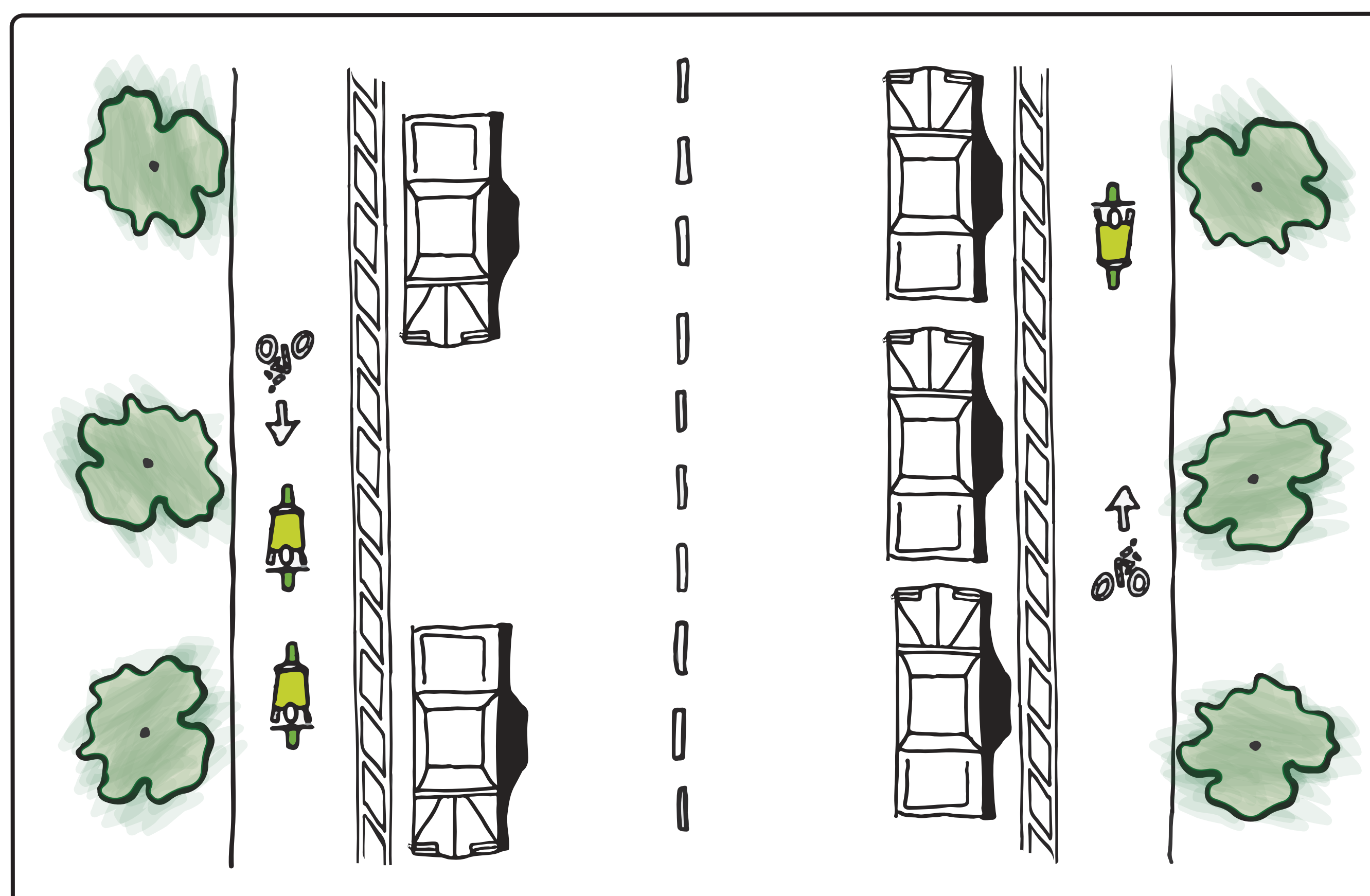
A Cycle Track is an on-street bicycle lane that is physically separated (often by a parking lane) from vehicular and pedestrian traffic. These lanes allow for bicyclists to feel more comfortable and protected while riding adjacent to traffic.

Suggested Location:

Baseline Road (30th Street to Foothills Parkway) summer 2013 and
University (7th Street and Broadway) spring/summer 2014.



Several onstreet parking spaces along University would be removed to increase motorists' visibility of cyclists at intersections and driveways.



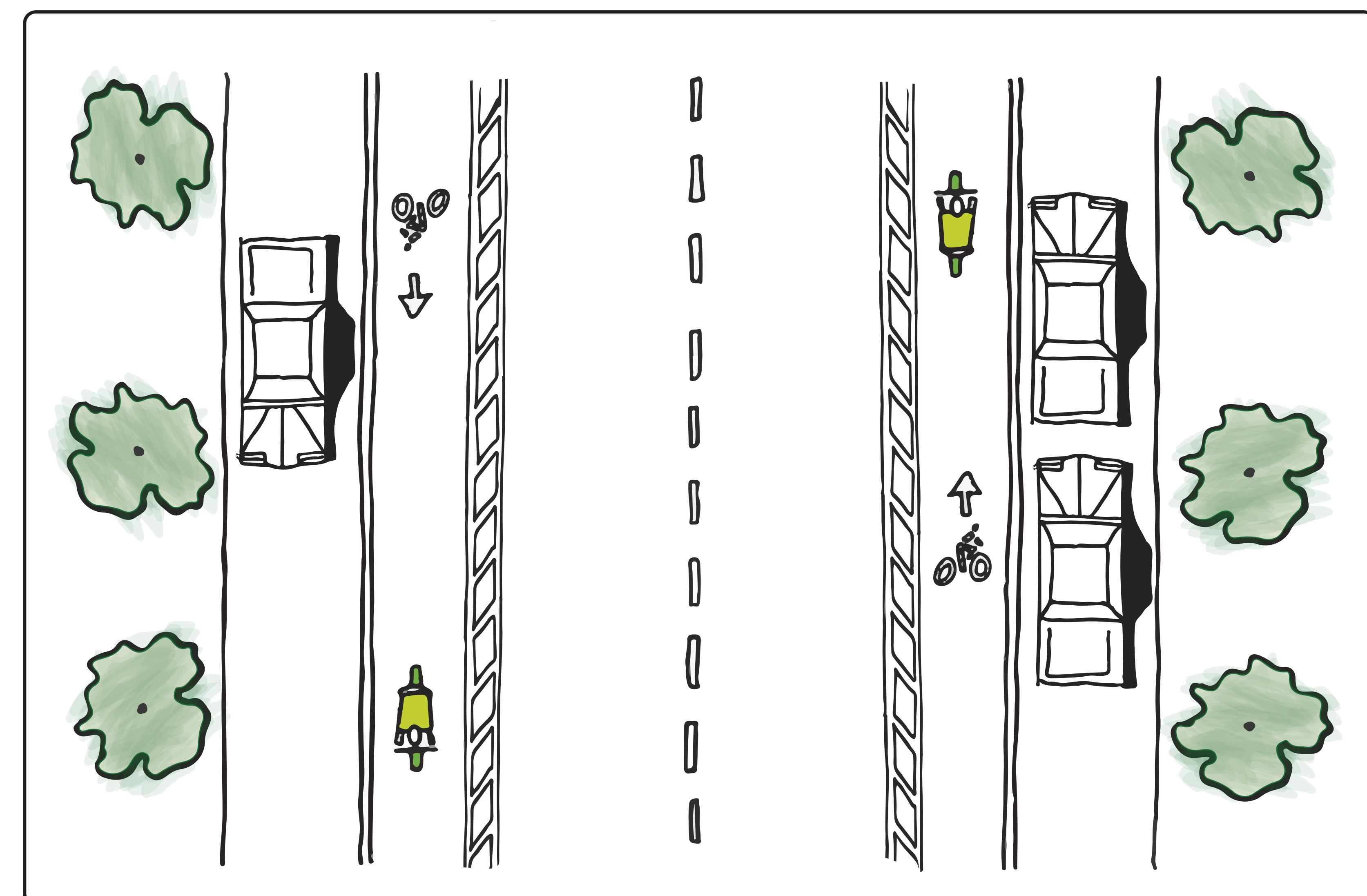
Buffered Bike Lane

A Buffered Bike Lane provides a more protected and comfortable space for cyclists than a conventional bike lane and does not have the same barriers to sight lines as a Cycle Track – where view of cyclists may be obstructed by parked cars.



Suggested Location:

University Avenue (west of Broadway)



Complete Streets Demonstration Bike Innovations

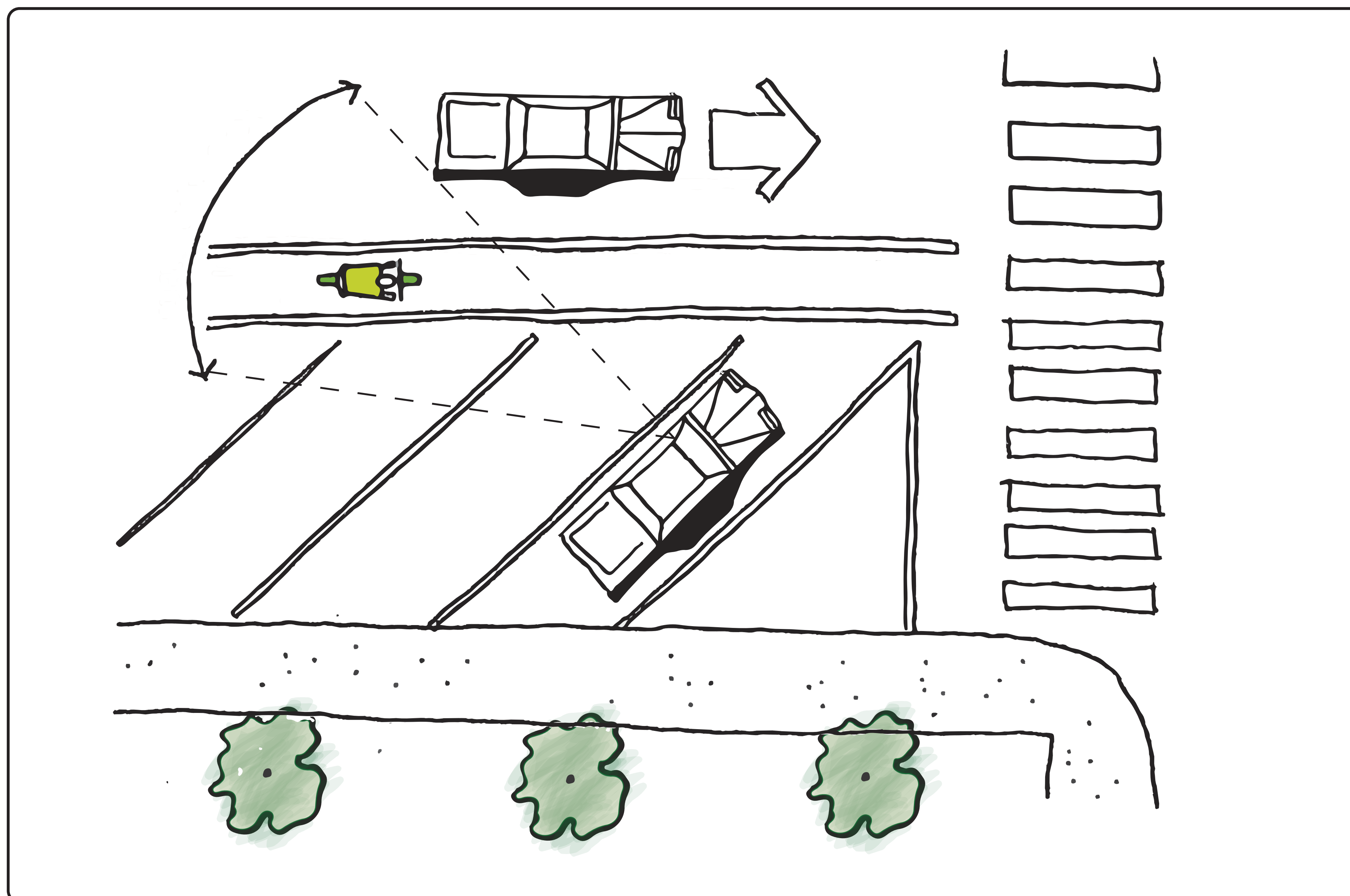
The "Living Laboratory" will install innovative bike-way treatments, creating an interactive environment for cyclists to experience and provide feedback on how these treatments address their need for improved mobility, comfort and safety. Proposed demonstration projects include:

Back-in-Angle Parking

Change angled parking to Back-in angled parking, in an effort to reduce the potential for conflict and documented collisions between cyclists and vehicles backing out blindly into the bike lane.

Suggested Location:

University Avenue
(east of Broadway)

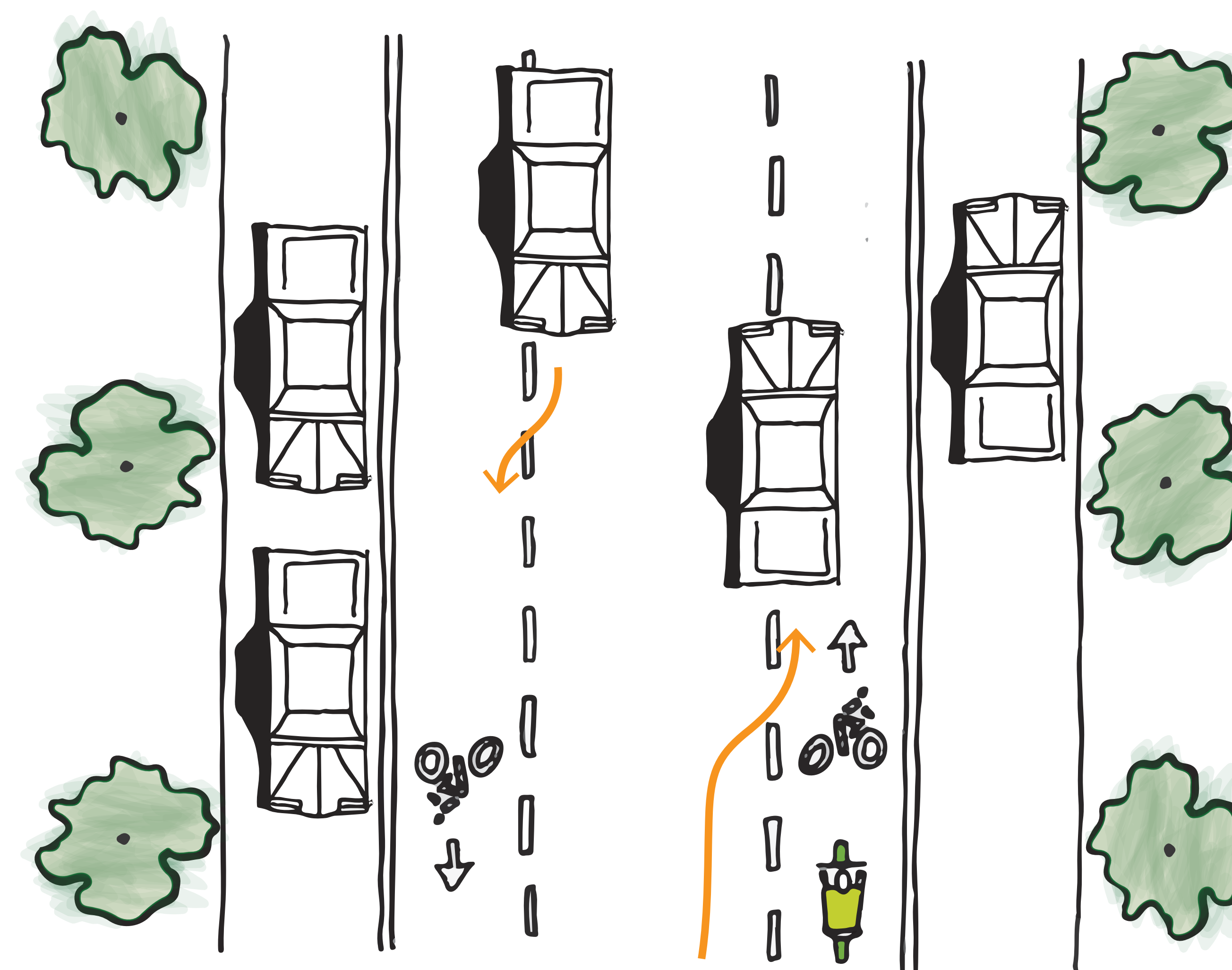


Advisory Bike Lane

Used on low volume streets that are too narrow for traditional bike lanes, this treatment is marked with a solid white line on the left (next to the parked cars) and a dotted line on the right. This on-street bike lane variation prioritizes space for cyclists while still allowing motorists to encroach into the bike lane if needed to pass oncoming traffic.

Suggested Location:

Harvard Lane (south of Dartmouth)



Center vehicle lane
space would be
reduce to anywhere
between 14'-18'
wide.

Complete Streets Demonstration Bike Innovations

The "Living Laboratory" will install innovative bike-way treatments, creating an interactive environment for cyclists to experience and provide feedback on how these treatments address their need for improved mobility, comfort and safety. Proposed demonstration projects include:

Bike Boulevard

Bike Boulevards are residential streets with low volumes of auto traffic and low speeds where bicyclists, pedestrians, and local vehicular access are given the priority. By branding these streets as the best and lowest stress routes we can provide a safer and more relaxing place to ride and walk while encouraging mode share.

Suggested Location:

13th Street (Balsam to North
Boulder Recreation Center)



Bike Box

A Bike Box is a designated, marked area at a signalized intersection that places bicycles at the front of the queue. Bike boxes increase the visibility of bicyclists and allow them to enter/clear the intersection before motor vehicles.

Suggested Location:

Folsom at Canyon (south bound)



Bike Parking Regulations

A three part strategy to improve bike parking is in the works: Bike Corral Expansion, Bike Parking Subsidy for existing development, and Bike Parking Regulations Update for new development. The objective is to better accommodate future bike parking demand by introducing a more diverse set of tools to provide bike parking.



Complete Streets Innovations For Future Consideration

The initiatives below require additional study or a public process to explore community and Board interest. Each are still under consideration and may be advanced as part of the living laboratory concept.

Spruce Street

This residential street between 15th Street and Folsom offers a good east/west connection that is often used by cyclists but currently lacks dedicated bicycle infrastructure. There is room within the roadway to dedicate space for cyclists. The City of Boulder's Transportation Departments is considering ways to improve this corridor for cyclist.



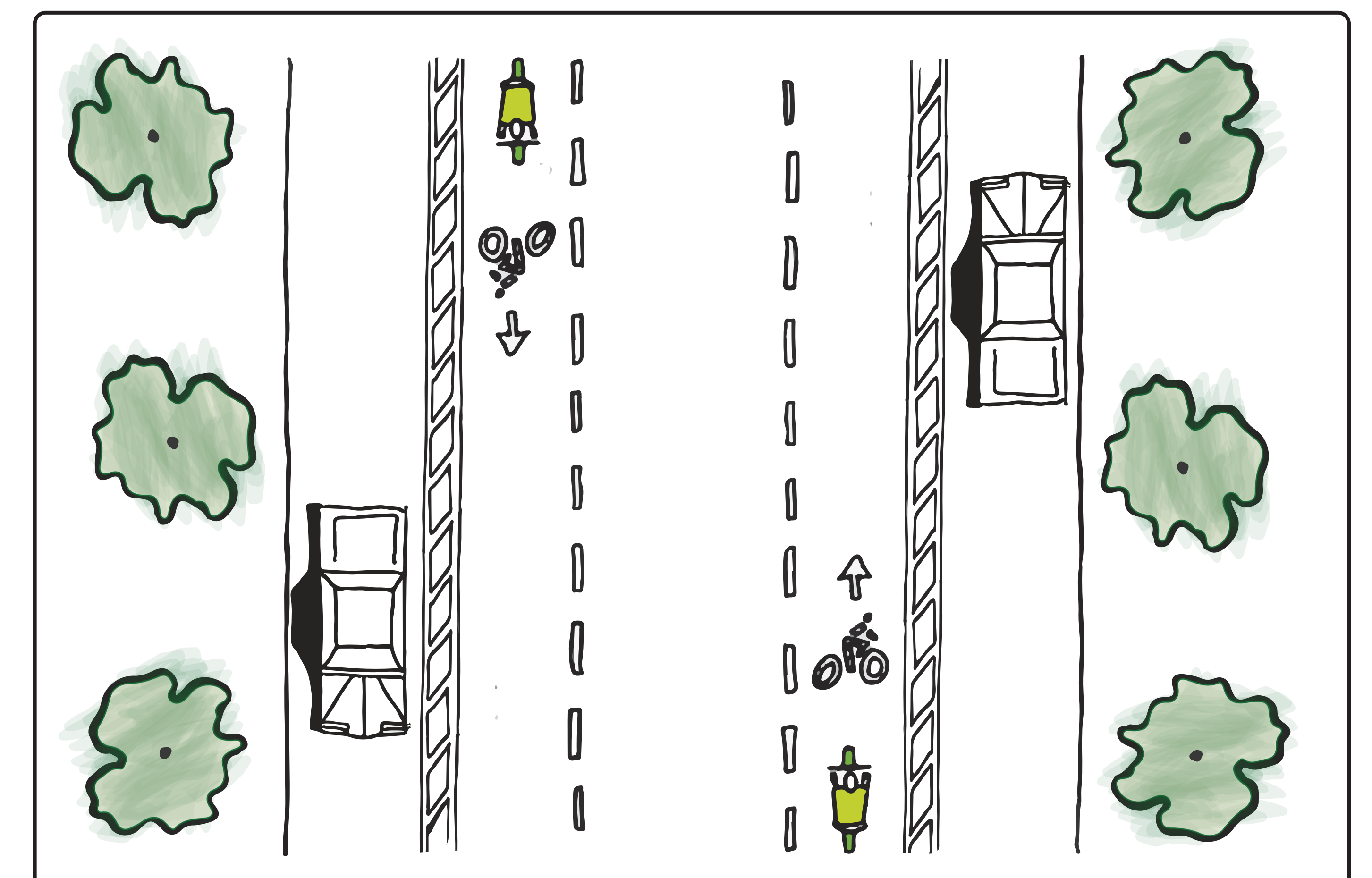
Striped Bike Lanes
(standard treatment)



Sign and stripe as a Bike Boulevard



Create a new treatment called a
"buffered advisory bike lane" or BABL
A BABL would create a narrow center area
for motor vehicles (16' or so) and then the
remaining space would be for buffered bike
lanes and on-street parking



Complete Streets Innovations For Future Consideration

The initiatives below require additional study or a public process to explore community and Board interest. Each are still under consideration and may be advanced as part of the living laboratory concept.

Glow Paint for Multi-use Paths

Use photoluminescence paint that charges during the day and glows for up to 10 hours at night on multi-use paths to denote lanes and traffic markers at locations with limited site distance or other engineering constraints.

Suggested Location:

Boulder Creek Path at 29th Street entrance to Scott Carpenter Park; Bear Creek Path at Martin Drive underpass west approach.

Slip resistance of products must be confirmed before demo installation.

Electric-assist Bike Policy

Consider a trial period to test the use of electric-assist bicycles (e-bikes) upon off-street multi-use pathways. Local ordinance in the city of Boulder allows electric assisted bicycles to operate on streets and within designated bicycle lanes. But, e-bikes are currently prohibited from operating on paths and sidewalks. A public process is suggested to be convened this fall to explore the community interest in this innovation.

Slow Zones

Established in small, self-contained areas that consist primarily of local residential streets, neighborhood Slow Zones reduce the speed limit to 20 mph and add mitigation measures to change driver behavior. Additional public process is necessary to revisit the City's traffic mitigation program policies and procedures. This could be prioritized in 2014 or beyond.

Revisioning 30th Street Corridor

A comprehensive study is required and a proposed priority of the CU East Campus Connection project (see Integration with TMP Focus Areas). Reconfiguring the roadway segment from Baseline to Arapahoe roads by converting the four-lane roadway into a three-lane roadway. This treatment would allow new space to be dedicated to bike, pedestrian and transit improvements as well as context sensitive and urban design enhancements.

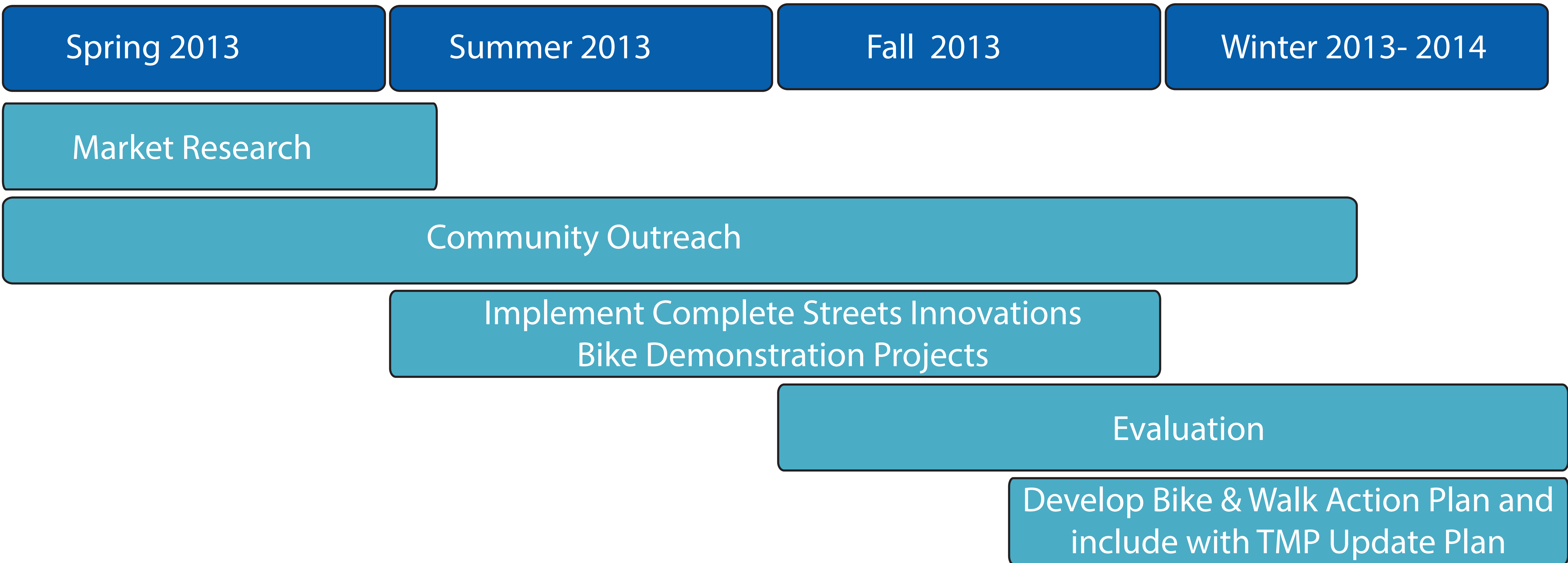
Complete Streets Evaluation & Project Schedule

Evaluation

Performance monitoring of the living laboratory bike innovation demonstration projects will include several qualitative and quantitative measurements:

- Bike and Walk Audits, Focus Groups and a Feedback Panel are forums that have been established to offer community interaction and public input before, during and after treatments are installed.
 - Transportation data will be collected and analyzed to provide a before/after comparison of modal traffic volume, vehicle speeds, and collision experience.
 - Field observations to track driver and bicyclist behavior also will be conducted.
 - Federal Highway Administration FHWA authorization is required to experiment with advisory Bike Lane innovation(s). Note: Evaluation criteria and Installation of this treatment depends on FHWA review and approval.
- A Low-stress bicycle network analysis will be conducted to evaluate before/after level of "traffic stress" and define whether treatments reduce stress level for bicyclists. High-stress streets are measured as those with high speed limits, limited or non-existent bike lanes and signage, and large distances to cross at intersections.

Complete Streets Bike Innovations Project Schedule



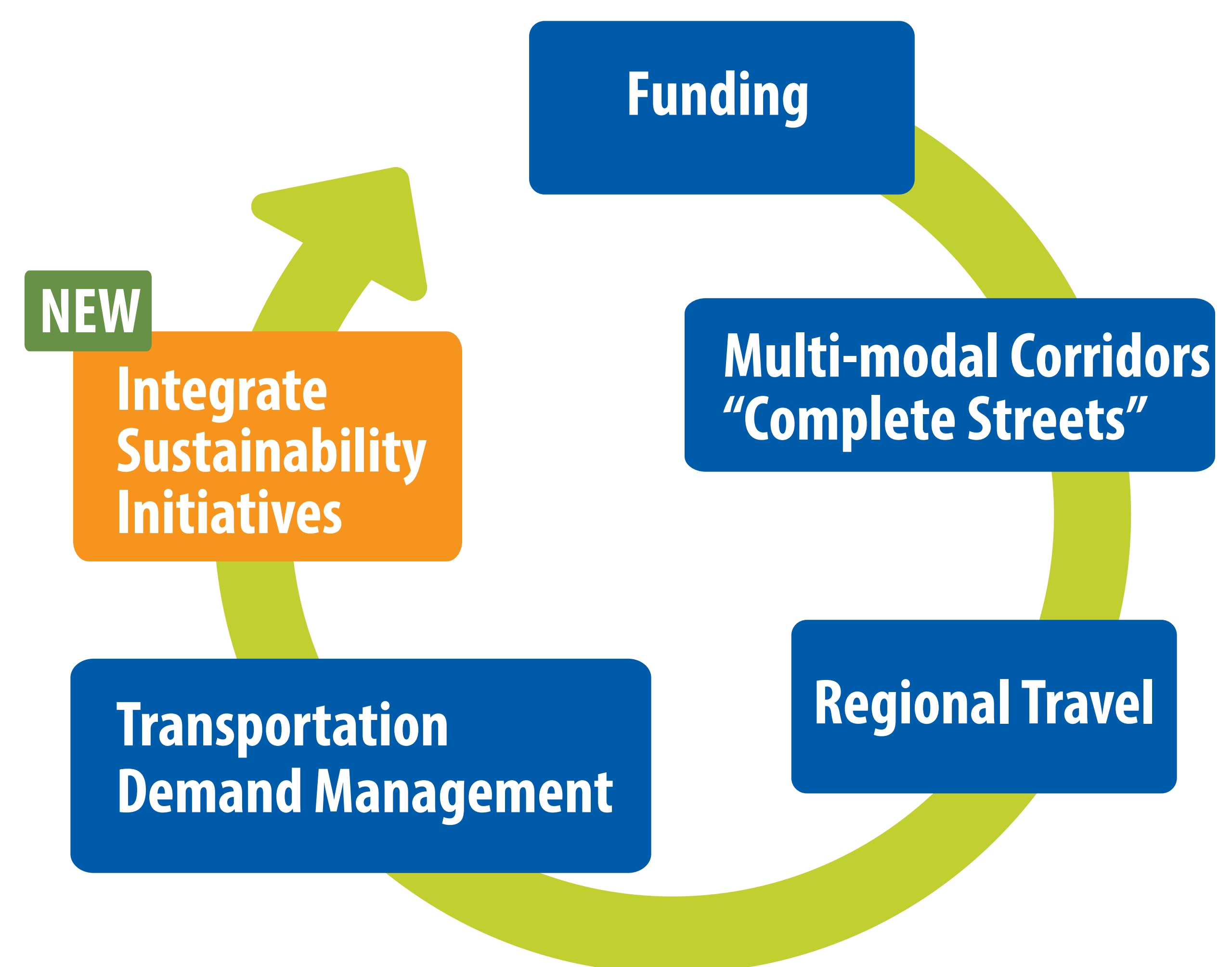
TMP Update Schedule

The schedule for the TMP Update is being adjusted to reflect the city process and work load associated with a potential ballot initiative for transportation funding in November 2013. Staff will continue to move forward with TMP Update process accordance with City Council and Transportation Advisory Board guidance, incorporating TAB comments and community input, throughout 2013 and into 2014.

2013 TMP

Integration with TMP Focus Areas

The Bike and Pedestrian Innovations work plan in relation to the other TMP focus areas is detailed below. More information on focus areas is available Online at www.BoulderTMP.net.



- **The Bike and Pedestrian Innovations are one element of the Complete Streets Focus Area other elements include:**

Complete Streets: Transit

Combining public transit with bicycle travel extends the potential for greater reduction in single occupant vehicle trips. Integration includes strategies to provide covered and secure long term bike parking at transit stations, increase the capacity for transit vehicles to transport bicycles will attract new users to both modes, and complete bike-way connections that serve the first and final mile of transit trips to key destinations.

Complete Streets: CU East Campus Connection Project

As an area of significant change, this effort is intended to coordinate planning for bicycle and pedestrian connections between the University of Colorado (CU) and the city. Planning studies will evaluate options to change the transportation engineering and built environment along Colorado Boulevard from 28th Street to Foothills Parkway and along 30th Street from Arapahoe to Baseline roads. Several new connections also are proposed for construction as funding becomes available.

- **Regional Travel**

The city continues to work with our community and regional partners to advance our goals to expand travel options on regional corridors. This work will focuses on the in-commute trip as well as the first and last mile and mid-day travel options. Key connections include a commuter bike-way along US 36 between Boulder and Westminster, on and off-street bike-ways along Arapahoe Rd between Cherryvale and 75th Street, and the LOBO trail between Longmont and Boulder and the RTD Northwest Area Mobility study.

- **Transportation Demand Management (TDM)**

Promoting more efficient use of the existing transportation system, TDM strategies increase travel choices, offering the opportunity to choose how, when and, if travel will be by car or in some other way, with the aim of balancing demand with the transportation system. Collaboration activities includes the exploration of a Community wide Eco Pass and development of TDM packages for new developments including to encourage walking and biking managed parking, secure bike parking and change rooms, and commuter incentive programs like Bike to Work Day.

2013 TMP Integration with Sustainability Initiatives

A major focus of the TMP update also includes considering how the transportation system can contribute to city sustainability efforts and greenhouse gas reduction. Additionally, collaboration and integration across city-wide sustainability initiatives in alignment with the city's Sustainability Framework is an objective of the TMP Update. This framework is intended to support integration across planning areas and to encourage new thinking on city functions. Integration with other planning initiatives include:

Sustainability Framework

The City's Sustainability Framework provides a lens through which the TMP Update and other work efforts are being developed. While economic vitality, environmental quality and social health continue to be core sustainability principles, as the TMP evolves it will reflect and respond to all of the themes of this framework.

Climate Commitment

A priority of the Climate Commitment initiative is to establish an updated community Green House Gas (GHG) protocol and develop a new baseline and inventory. Transportation activities represent the second largest source of community GHG emissions. Expanding the complete streets system, enhancing the integration of land use and transportation planning, and increasing neighborhood accessibility so that more daily activity trips can occur locally will be critical to achieving Climate Commitment goals.

Sustainable Streets + Centers

The ultimate goal of this effort is to develop prototypes of land use, transportation facility, site and building design and performance expectations that can be used to guide development across the community where more detailed plans do not exist. Corridors include East Arapahoe, 30th Street, and Colorado.

Civic Area plan

In addition to city-owned properties at the core, the Civic Area planning area is bounded by 9th to 17th streets and Canyon Boulevard to Arapahoe Avenue. The goal of the project is to transform this area into Boulder's social, civic, and environmental heart; one that prioritizes purpose per square foot over price per square foot. As a primary destination for a variety of special events that has limited opportunities for parking, multi-modal access is a primary interest of the plan.

Access Management and Parking Strategies

A comprehensive, phased, citywide initiative to develop overarching guiding principles for citywide access and parking strategies. AMPS is exploring new strategies to enhance access and expand managed parking strategies throughout our community. Provisions for bicycle parking in collaboration with a connected system of bike ways are tools for integrated multi-modal access.

Comprehensive Housing Strategies

While the scope of this project is still being defined, the numbers and type of housing units available in Boulder plays a significant role in the number of potential in-commuting employees. With an estimated 50 thousand in-commuters today, these employees are both vital to the city's economy and difficult to provide with alternatives to driving alone. The location and design of future housing within the city can support increased use of the non automotive modes and reduce the number of in-commuting employees.

Parks and Recreation Master Plan

To ensure that recreation opportunities are readily available and attractive to residents, the City of Boulder and its future will be guided by a new Master Plan. The opportunity to safely access parks by walking or biking is an important part of an active community and a focus area of the Plan.